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6	1093	713/176.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/12 15:01
7	1021	283/72.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/12 15:02
-	5	943365.ap.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:46
-	863	steganograph\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:25
-	9825	water\$1mark\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:27
-	2617303	digital\$4 or electronic\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:28
-	734419	bit or byte or (binary adj (code or data or information or number or value or digit))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:31
-	2537432	imag\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:31
-	255394	pixel or voxel	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:32
-	107009	(film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:57
-	606609	water\$1mark or fingerprint or (finger adj print) or mark	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:06
-	483830	encod\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:06
-	497073	random	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:53

-	750802	noise	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 13:56
-	1482580	luminance or illumination or intensity or magnitude or brightness or radiance or (light adj (emitt\$4 or emission))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:44
-	10077	steganograph\$6 or water\$1mark\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:48
-	737011	((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:52
-	65490	((((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:53
-	23398	encod\$3 same random	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:54
-	9258	((((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) same ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:57
-	73017	((((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) or encod\$3) same (luminance or illumination or intensity or magnitude or brightness or radiance or (light adj (emitt\$4 or emission)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:58
-	17764	encod\$3 same noise	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:58
-	38304	(encod\$3 same random) or (encod\$3 same noise)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 14:58
-	1233	(steganograph\$6 or water\$1mark\$3) and imag\$3 and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:01

-	50	((steganograph\$6 or water\$1mark\$3) and imag\$3 and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3)) and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) same ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:01
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-	571	((steganograph\$6 or water\$1mark\$3) and imag\$3 and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3)) and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) or encod\$3) same (luminance or illumination or intensity or magnitude or brightness or radiance or (light adj (emitt\$4 or emission))))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:04

-	18	((steganograph\$6 or water\$1mark\$3) and imag\$3 and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3)) and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) same ((film or image or picture or photograph or figure or frame) adj (speed or velocity or rate or tempo or pace or acceleration)))) and (((steganograph\$6 or water\$1mark\$3) and imag\$3 and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3)) and ((encod\$3 same random) or (encod\$3 same noise))) and (((steganograph\$6 or water\$1mark\$3) and imag\$3 and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) with encod\$3)) and (((digital\$4 or electronic\$4) adj (water\$1mark or fingerprint or (finger adj print) or mark)) or (bit or byte or (binary adj (code or data or information or number or value or digit)))) or encod\$3) same (luminance or illumination or intensity or magnitude or brightness or radiance or (light adj (emitt\$4 or emission))))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:04
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-	1224181	encod\$3 or embed\$4 or hid\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/24 15:08
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-	9946	watermark\$3 or steganograph\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:51
-	7762125	information or code or ID or data or value or key or keyword	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:48
-	843688	bit or byte or binary	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:50
-	846993	encod\$3 or embed\$3 or imbed\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:51

-	648627	watermark\$3 or steganograph\$6 or signature or fingerprint or mark	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:40
-	8070	((encod\$3 or embed\$3 or imbed\$3) near3 (watermark\$3 or steganograph\$6 or signature or fingerprint or mark))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:54
-	5998	((encod\$3 or embed\$3 or imbed\$3) near3 (watermark\$3 or steganograph\$6 or signature or fingerprint or mark)) same (information or code or ID or data or value or key or keyword)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:56
-	107100	(film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 14:57
-	33	((encod\$3 or embed\$3 or imbed\$3) near3 (watermark\$3 or steganograph\$6 or signature or fingerprint or mark)) same (information or code or ID or data or value or key or keyword)) same ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 15:27
-	10504615	represent\$3 or includ\$3 or compris\$3 or indicat\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:40
-	18	((watermark\$3 or steganograph\$6 or signature or fingerprint or mark) near3 (represent\$3 or includ\$3 or compris\$3 or indicat\$3)) near3 ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:03
-	8840	watermark	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:03
-	2298	watermark near3 (represent\$3 or includ\$3 or compris\$3 or indicat\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:05
-	42476	382/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:05
-	630	(watermark near3 (represent\$3 or includ\$3 or compris\$3 or indicat\$3)) and 382/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:39
-	88404	watermark\$3 or steganograph\$6 or signature or fingerprint	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:40
-	10724514	represent\$3 or includ\$3 or compris\$3 or indicat\$3 or correspond\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:41

-	3	(watermark\$3 or steganograph\$6 or signature or fingerprint) adj3 (represent\$3 or includ\$3 or compris\$3 or indicat\$3 or correspond\$3) adj5 ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:47
-	0	(watermark\$3 or steganograph\$6) adj (information or code or ID or data or value or key or keyword) adj5 (represent\$3 or includ\$3 or compris\$3 or indicat\$3 or correspond\$3) adj5 ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:53
-	2710	(watermark\$3 or steganograph\$6) adj (information or code or ID or data or value or key or keyword)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:54
-	11	((watermark\$3 or steganograph\$6) adj (information or code or ID or data or value or key or keyword)) same ((film or image or picture or photograph or figure or frame) adj3 (speed or velocity or rate or tempo or pace or acceleration))) and 382/\$.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/28 16:55
-	12	5930369.pn. 5915027.pn. 6353479.pn. 5734752.pn. 5530759.pn. 6542927.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/29 09:18
-	2	5636292.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/04 14:14
-	2	5710834.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/04 14:19
-	2	5745604.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/04 15:09
-	2	5850481.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/10/04 14:36
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1 Watermark detection based on the properties of error control codes
Loo, P.; Kingsbury, N.;

Vision, Image and Signal Processing, IEE Proceedings- , Volume: 150 , Issue: 2 , 21 April 2003

Pages:115 - 121

[\[Abstract\]](#) [\[PDF Full-Text \(640 KB\)\]](#) **IEE JNL**
2 Attacks on digital watermarks: classification, estimation based attacks and benchmarks
Voloshynovskiy, S.; Pereira, S.; Pun, T.; Eggers, J.J.; Su, J.K.;

Communications Magazine, IEEE , Volume: 39 , Issue: 8 , Aug. 2001

Pages:118 - 126

[\[Abstract\]](#) [\[PDF Full-Text \(2536 KB\)\]](#) **IEEE JNL**
3 Audio watermarking techniques using sinusoidal patterns based on pseudorandom sequences
Liu, Z.; Inoue, A.;

Circuits and Systems for Video Technology, IEEE Transactions on , Volume: 13 , Issue: 8 , Aug. 2003

Pages:801 - 812

[\[Abstract\]](#) [\[PDF Full-Text \(607 KB\)\]](#) **IEEE JNL**
4 Capacity and reliability of digital watermarking
Zhang Fan; Zhang Hongbin;

Business of Electronic Product Reliability and Liability, 2004 International Conference on , Apr 27-30, 2004

Pages:162 - 165

[Abstract] [PDF Full-Text (395 KB)] IEEE CNF

5 Novel blind multiple watermarking technique for images

Wong, P.H.W.; Au, O.C.; Yeung, Y.M.;

Circuits and Systems for Video Technology, IEEE Transactions on , Volume: 13 , Issue: 8 , Aug. 2003

Pages:813 - 830

[Abstract] [PDF Full-Text (2004 KB)] IEEE JNL

6 Power-spectrum condition for energy-efficient watermarking

Su, J.K.; Girod, B.;

Multimedia, IEEE Transactions on , Volume: 4 , Issue: 4 , Dec. 2002

Pages:551 - 560

[Abstract] [PDF Full-Text (762 KB)] IEEE JNL

7 Robust optimum detection of transform domain multiplicative watermarks

Qiang Cheng; Huang, T.S.;

Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Sigr Processing, IEEE Transactions on] , Volume: 51 , Issue: 4 , April 2003

Pages:906 - 924

[Abstract] [PDF Full-Text (1211 KB)] IEEE JNL

8 Information retrieval in digital watermarking

Hernandez Martin, J.R.; Kutter, M.;

Communications Magazine, IEEE , Volume: 39 , Issue: 8 , Aug. 2001

Pages:110 - 116

[Abstract] [PDF Full-Text (1376 KB)] IEEE JNL

9 Geometric properties of watermarking schemes

Ee-Chien Chang; Orchard, M.;

Image Processing, 2000. Proceedings. 2000 International Conference on , Vol 3 , 10-13 Sept. 2000

Pages:714 - 717 vol.3

[Abstract] [PDF Full-Text (304 KB)] IEEE CNF

10 An asymmetric watermarking system with many embedding watermarks corresponding to one detection watermark

Tae Young Kim; Hyuk Choi; Kiryung Lee; Taejeong Kim;

Signal Processing Letters, IEEE , Volume: 11 , Issue: 3 , March 2004

Pages:375 - 377

[Abstract] [PDF Full-Text (144 KB)] IEEE JNL

11 Digital watermarking using zerotree of DCT

Chuan-Fu Wu; Wen-Shyong Hsieh;

Consumer Electronics, IEEE Transactions on , Volume: 46 , Issue: 1 , Feb. 2001

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[\[Abstract\]](#) [\[PDF Full-Text \(320 KB\)\]](#) [IEEE JNL](#)

12 **Temporal Synchronization in Video Watermarking**

Lin, E.T.; Delp, E.J.;

Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] , Volume: 52 , Issue: 10 , Oct. 2004

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[\[Abstract\]](#) [\[PDF Full-Text \(776 KB\)\]](#) [IEEE JNL](#)

13 **Bit-plane watermarking for zerotree-coded images**

Shih-Hsuan Yang; Hsin-Chang Chen;

Circuits and Systems, 2002. APCCAS '02. 2002 Asia-Pacific Conference on , Volume: 2 , 28-31 Oct. 2002

Pages:73 - 78 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(619 KB\)\]](#) [IEEE CNF](#)

14 **Spatial domain digital watermarking of multimedia objects for buyer authentication**

Mukherjee, D.P.; Maitra, S.; Acton, S.T.;

Multimedia, IEEE Transactions on , Volume: 6 , Issue: 1 , Feb. 2004

Pages:1 - 15

[\[Abstract\]](#) [\[PDF Full-Text \(800 KB\)\]](#) [IEEE JNL](#)

15 **A blind watermarking algorithm with semantic meaningful watermark**

Chun-Hsiang Huang; Ja-Ling Wu; Ding-Yun Chen;

Signals, Systems and Computers, 2000. Conference Record of the Thirty-Four Asilomar Conference on , Volume: 2 , 29 Oct.-1 Nov. 2000

Pages:1827 - 1830 vol.2

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